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## In the Claims

- (Currently Amended) A hydrophobic chemical mechanical planarization (HCMP) pad comprising:
   an organic polymer; and
   a metal agent, wherein the metal agent includes at least one metal β-diketonate ligand,
   wherein the pad is useful for planarizing a semiconductor wafer.
- 2. (Previously Presented) The HCMP pad of claim 1 wherein said organic polymer comprises one of a polyurethane or a polyether based material.
- 3. (Previously Presented) The HCMP pad of claim 1 wherein said organic polymer is formed of a polyol and di-isocyanate.
- 4. (Previously Presented) The HCMP pad of claim 1 wherein said organic polymer is reactive with one of a polyfunctional amine, a diamine, a triamine, a polyfunctional hydroxyl, and a mixed functionality hydroxylamine.
- 5. (Previously Presented) The HCMP pad of claim 1 further comprising a matrix material selected from the group consisting of a melamine, a polyester, a polysulfone, polyvinyl acetate, and a fluorinated hydrocarbon.
- 6. (Cancelled)
- 7. (Previously Presented) The HCMP pad of claim 1 wherein the metal agent includes one of cobalt, palladium, nickel, zinc, titanium, zirconium, hafnium, and copper.
- 8. (Currently Amended) The HCMP pad of claim 1 wherein the metal agent & diketonate includes a side group selected from hydrogen, an aryl, a perfluoraryl, an alkyl, a perfluoroalkyl, and a t-butyl group.
- 9. (Previously Presented) The HCMP pad of claim 1 wherein a metal feature on the semiconductor wafer is isolated during planarization.
- 10. (Previously Presented) The HCMP pad of claim 1 wherein said metal agent includes a metal compatible with a metal of the metal feature.

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- 11. (Previously Presented) The HCMP pad of claim 1, wherein said pad substantially retains a planarization characteristic during the planarization.
- 12. (Previously Presented) The HCMP pad of claim 11 wherein the planarization characteristic is one of shearing, hardness, wearing, cross-linking, water uptake and electrical character.
- 13. (Previously Presented) The HCMP pad of claim 1, wherein said pad substantially avoids uptake of aqueous slurry during the planarization.
- 14.-17. (Cancelled)
- 18. (Withdrawn) A method comprising mixing an organic polymer and a metal agent to form a chemical mechanical planarization (CMP) pad material, wherein the metal agent includes at least one  $\beta$ -diketonate ligand.
- 19. (Withdrawn) The method of claim 18 further comprising: adding a foaming agent and a curing agent to the CMP material; reducing pressure around the CMP material; and heating the CMP material.
- 20. (Withdrawn) The method of claim 19 further comprising obtaining a hydrophobic CMP pad from a log formed of the CMP material.
- 21. (Withdrawn) A method of fabricating a semiconductor device, said method comprising:

  providing a hydrophobic chemical mechanical planarization (HCMP) pad according to claim 1;

  and

  planarizing the semiconductor device with the HCMP pad during the fabrication of said device.
- 22. (Withdrawn) The method of claim 21 wherein the planarizing further comprises: delivering an aqueous slurry to a surface of the HCMP pad; moving the HCMP pad in a first direction; and moving the semiconductor device in a second direction different from the first direction.

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- 23. (Withdrawn) A method of forming a chemical mechanical planarization (CMP) material said method comprising mixing components to form the CMP material wherein the CMP mixture comprises an organic polymer and a metal agent dissolved in an organic solvent.
- 24. (Withdrawn) The method of claim 23 further comprising: adding a foaming agent and a curing agent to the CMP material; reducing pressure around the CMP material; and heating the CMP material.
- 25. (Withdrawn) The method of claim 24 further comprising obtaining a hydrophobic CMP pad from a log formed of the CMP material.
- 26. (Cancelled)
- 27. (Previously Presented) The HCMP pad of claim 1 wherein said organic polymer comprises a urethane.
- 28. (Withdrawn) The method of claim 18, wherein the metal agent is dissolved in an organic solvent.
- 29. (Withdrawn) The method of claim 18, wherein the metal agent includes one of cobalt, palladium, nickel, zinc, titanium, zirconium, hafnium, and copper.
- 30. (Withdrawn) The method of claim 18, wherein the metal agent  $\beta$ -diketonate ligand includes a side group selected from hydrogen, an aryl, a perfluoraryl, an alkyl, a perfluoroalkyl, and a t-butyl group.
- 31. (Withdrawn) The method of claim 18, wherein the metal agent further includes at least one additional ligand comprising the formula -OR, wherein R is selected from the group consisting of hydrogen, an aryl, an alkyl, a perfluoroaryl, a perfluoroalkyl, and combinations thereof.
- 32. (Withdrawn) The method of claim 23, wherein the metal agent includes one of cobalt, palladium, nickel, zinc, titanium, zirconium, hafnium, and copper.
- 33. (Withdrawn) The method of claim 23, wherein the metal agent includes a  $\beta$ -diketonate ligand having a side group selected from the group consisting of t-butyl and perfluoroalkyl.

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34. (Previously Presented) The HCMP pad of claim 1 wherein the metal agent further includes at least one additional ligand comprising the formula -OR, wherein R is selected from the group consisting of hydrogen, an aryl, an alkyl, a perfluoroaryl, a perfluoroalkyl, and combinations thereof.